Case 3097

Bolboceras Kirby, 1819 (July) (Insecta, Coleoptera): proposed precedence over *Odonteus* Samouelle, 1819 (June)

M.L. Jameson

University of Nebraska State Museum, W436 Nebraska Hall, Lincoln, Nebraska 68588–0514, U.S.A. (e-mail: mjameson1@unl.edu)

H.F. Howden

Canadian Museum of Nature, P.O. Box 3443, Station 'D', Ottawa, Canada K1P 6P4 (e-mail: henry.howden@sympatico.ca)

Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Bolboceras* Kirby, 1819 for a group of scarab beetles (family GEOTRUPIDAE) by giving it conditional precedence over the older name *Odonteus* Samouelle, 1819 whenever they are considered to be synonyms. The name *Bolboceras* is threatened by a single usage by Krell in 1990 of the otherwise unused name *Odonteus*.

Keywords. Nomenclature; taxonomy; Coleoptera; GEOTRUPIDAE; Bolboceras; Odonteus; Odontaeus; Scarabaeus mobilicornis; Scarabaeus armiger; scarab beetle.

1. Kirby, 1819 (p. 459) proposed the generic name *Bolboceras* for a genus of scarab beetle (family GEOTRUPIDAE). Although the publication in which the name *Bolboceras* first appeared was dated 1818, it was not published until July 1819 (see Raphael, 1970, p. 64). Kirby did not designate a type species for the genus *Bolboceras*, but he did state (1819, p. 461) that the 'details of *Bolboceras* were taken from *B. quadridens*'. Curtis (1829, p. 74) subsequently designated *Scarabaeus mobilicornis* Fabricius, 1775 (pp. 11–12) as the type species of *Bolboceras*.

2 Samouelle (June 1819, p. 189) proposed the generic name *Odonteus* for a genus of scarab beetle (family GEOTRUPIDAE), and *Scarabaeus mobilicornis* Marsham, 1802 (pp. 8–9) is the type species by monotypy. This name is a junior primary homonym of *Scarabaeus mobilicornis* Fabricius, 1775, but is recognised as a junior synonym of *Scarabaeus armiger* Scopoli, 1772 (p. 78) (see Boucomont, 1912, p. 15; Howden, 1984, p. 5; Krell, 1990, p. 104). No description of the genus was provided by Samouelle. The name *Odontaeus* Dejean, 1821 (p. 56) is sometimes incorrectly used in place of the name *Odonteus* Samouelle, 1819. *Odontaeus* Dejean, 1821 was synonymized with the genus *Bolboceras* Kirby by Cartwright (1953, p. 96).

3. After initial publication, the name *Odonteus* was not used until it was shown by Krell (1990) to be synonymous with and to pre-date the name *Bolboceras* Kirby, 1819. Despite many years of worldwide usage of the name *Bolboceras* for many hundreds of species (e.g. Boucomont, 1912; Neave, 1940). Krell proposed that the Principle of Priority should be implemented and that the name *Odonteus* Samouelle should be used instead of the name *Bolboceras* Kirby.

4. The genus presently includes ten species in the New World and one species (the type species) in the Old World. Old World and New World species are congeneric,

and one generic name should be applied to all species (see Cartwright, 1953). The genus *Bolboceras* is the type genus for the tribe Bolboceratini, subfamily BOLBOCERATINAE and family BOLBOCERATIDAE (referred to here as GEOTRUPIDAE). The genus has been redescribed by Wallis (1928) and by Woodruff (1973). The taxonomy and ecology of species in the genus were discussed by Howden (1955, 1964) and Woodruff (1973). If it were not for its use by Krell in 1990, the name *Odonteus* could be treated as a nomen oblitum under Articles 23.9.1 and 23.9.2 of the Code.

5. As the generic name *Odonteus* Samouelle has not been used in the primary taxonomic literature for many years, and because the name *Bolboceras* Kirby has been used during this period to refer to many widespread and well-known species of scarab beetles, we do not believe that Krell's (1990) acceptance of the priority of the name *Odonteus* Samouelle over the name *Bolboceras* Kirby will best serve nomenclatural stability. It will only cause confusion.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- to use its plenary power to give the name *Bolboceras* Kirby, 1819 precedence over the name *Odonteus* Samouelle, 1819, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Bolboceras* Kirby, 1819 (gender: masculine), type species by subsequent designation by Curtis (1829) *Scarabaeus mobilicornis* Fabricius, 1775, with the endorsement that it is to be given precedence over the name *Odonteus* Samouelle, 1819 whenever the two are considered to be synonyms;
 - (b) Odonteus Samouelle, 1819 (gender: masculine), type species by monotypy Scarabaeus mobilicornis Marsham, 1802 (a junior synonym of Scarabaeus armiger Scopoli, 1772), with the endorsement that it is not to be given priority over the name Bolboceras Kirby, 1819 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names: (a) *mobilicornis* Fabricius, 1775, as published in the binomen *Scarabaeus*
 - (a) *mobilicornis* Fabricius, 1775, as published in the onionien Scarabaeus mobilicornis (specific name of the type species of Bolboceras Kirby, 1819);
 (b) armiger Scopoli, 1772, as published in the binomen Scarabaeus armiger
 - (b) armiger Scopoli, 1772, as published in the billionnen Scarabaeus armiger (senior synonym of the specific name of Scarabaeus mobilicornis Marsham, 1802, type species of Odonteus Samouelle, 1819).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, 1.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



Bolboceras armiger Scopoli, 1772. Body length 7.5 mm. Photo by Donna Naughton, Canadian Museum of Nature.